

ABSTRACT OF THE DISCLOSURE

A caching mechanism for a virtual persistent heap. A feature of a virtual persistent heap is the method used to cache portions of the virtual persistent heap into the physical heap. The caching mechanism may be effective with small consumer and appliance devices that typically have a small amount of memory and that may be using flash devices as persistent storage. In the caching mechanism, the virtual persistent heap may be divided into cache lines. A cache line is the smallest amount of virtual persistent heap space that can be loaded or flushed at one time. Caching in and caching out operations are used to load cache lines into the heap or to flush dirty cache lines into the store. Different cache line sizes may be used for different regions of the heap. Translation between a virtual persistent heap address and the heap may be simplified by the caching mechanism.